

Notice of Allowability

Application No.

09/885,315

Examiner

Kristie D. Shingles

Applicant(s)

HAYASHI ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/26/2007.
2. ☒ The allowed claim(s) is/are 1,2,5,9,10,12,19 and 20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20070719.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application
- ☒ Interview Summary (PTO-413), Paper No./Mail Date 7/2007
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

kds/20070719

W. C. T. J.
WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

Per Applicant's Request for Continued Examination

Claims 1, 9, 19 and 20 have been amended.

Claims 3, 4, 6-8, 11 and 13-18 have been canceled.

Claims 1, 2, 5, 9, 10, 12, 19 and 20 are pending.

Claims 1, 2, 5, 9, 10, 12, 19 and 20 are allowed.

Continued Examination Under 37 CFR 1.114

I. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/26/2007 has been entered.

Response to Arguments

II. Applicant's arguments see Remarks pages 7-9 filed 3/12/2007, with respect to the pending claims have been fully considered and are persuasive. Therefore the 35 U.S.C. 103(a) rejections of the claims have been withdrawn.

Examiner's Amendment

III. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

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payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with Atty. Dexter T. Chang on July 19, 2007. Please make the following changes to Claims 1, 10, 19 and 20 and Figures 1 and 2:

- a. **Regarding claim 1:** in line 6, replace "from an outside" with—*from outside*—.
- b. **Regarding claim 10:** in line 2, replace "from an outside" with—*from outside*—.
- c. **Regarding claim 19:** in line 7, replace "from an outside" with—*from outside*—.
- d. **Regarding claim 20:** in line 7, replace "from an outside" with—*from outside*—.
- e. **On Figure 1:** indicate—*Prior Art*—.
- f. **On Figure 2:** indicate—*Prior Art*—.

Drawings

IV. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance

V. The prior art of record fails to teach neither singly nor in combination, the claimed limitations of: “carrying out a load-balancing process at a boundary node in said each area in a closed manner; calculating a normalized value used for the load-balancing process, based on address information of a packet supplied to an ingress node of the network from outside of the network; adding said normalized value to switching information of said packet; forwarding said packet from said ingress node to the plurality of nodes; receiving said packet from said ingress node at an area boundary node located on a boundary of the plurality of areas; extracting said normalized value, used for carrying out the load-balancing process in an area including said area boundary node, from the switching information of said packet; redistributing a traffic flow from a failed route to a route other than the failed route if receiving a failure notification at said ingress node or said area boundary node; deciding whether a traffic loss occurs by redistributing the traffic flow from said failed route to the route other than said failed route; and setting a new route and switching the traffic flow to the new route when it is decided at said deciding step that the traffic loss occurs by redistributing the traffic flow from said failed route to the route other than said failed route” as stated in independent claims 1, 9, 19 and 20 (*for support see Applicant's Specification: pages 5 line 20-page 6 line 20, page 35 line 10-page 35 line 37*).

Prior art: *Arrowood et al* (US 6,801,534), *Valdevit* (US 7,050,392), *Pelissier et al* (US 6,661,773), *Narvaez-Guarnieri et al* (US 6,721,899) and *Devarakonda et al* (US 6,424,992) teach routing management systems for detected failed routes and switching the traffic from a failed route another route. However, none specifically discloses or details “extracting said normalized value, used for carrying out the load-balancing process in an area including said area

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boundary node, from the switching information of said packet; redistributing a traffic flow from a failed route to a route other than the failed route if receiving a failure notification at said ingress node or said area boundary node; deciding whether a traffic loss occurs by redistributing the traffic flow from said failed route to the route other than said failed route; and setting a new route and switching the traffic flow to the new route when it is decided at said deciding step that the traffic loss occurs by redistributing the traffic flow from said failed route to the route other than said failed route”.

As discussed in Applicant's Remarks on pages 7-9 filed 3/12/2007, these limitations, in conjunction with other limitations in the independent and dependent claims, are not specifically disclosed or remotely suggested in the prior art of record. A review of Claims 1, 2, 5, 9, 10, 12, 19 and 20 in view of the Examiner's remarks above, indicates that these are allowable over the prior art of record. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

VI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00pm.

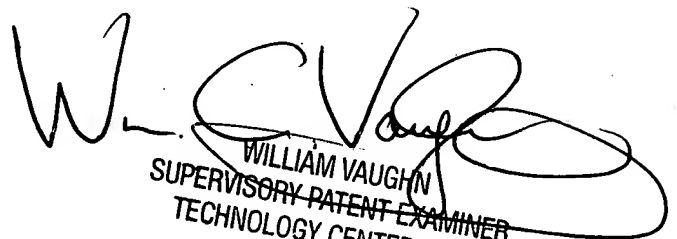
If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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